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| 10/587,913      | 07/31/2006  | Nobuo Takeshita      | 1190-0632PUS1       | 2547             |

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| EXAMINER |
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AGUSTIN, PETER VINCENT

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| ART UNIT | PAPER NUMBER |
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2627

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09/10/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

|                              |                                      |   |  |
|------------------------------|--------------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/587,913 | <b>Applicant(s)</b><br>TAKESHITA ET AL. |  |
|                              | <b>Examiner</b><br>Peter Agustin     | <b>Art Unit</b><br>2627                 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 14-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This application is a national stage entry (371) of PCT/JP04/12089, filed August 24, 2004.
2. Claims 1-20 are currently pending.

#### ***Election/Restrictions***

3. Applicant's election without traverse of Group I, claims 1-13 in the reply filed on August 1, 2008 is acknowledged.
4. Claims 14-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on August 1, 2008.
5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### ***Priority***

6. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Claim Objections***

7. Claims 8-10 are objected to because of the following informalities:  
Claims 8-10: "The optical disc of claim 1" should be --The optical disc of claim 6--.  
Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 2-4 & 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2-4 & 7-9 recite the term “near”, which is a relative term that renders the claim indefinite because: (a) the term is not defined by the claim; (b) the specification does not provide a standard for ascertaining the requisite degree; and (c) one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1, 2, 5-7 & 10-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al. (US 7,274,638).

In regard to claim 1, Lee et al. disclose a recording method (see title) for an optical disc (Figure 5A) having at least three recording layers (L0-L3), the method including a step of recording and reproducing test data for determining the optimal recording power (understood

from “OPC”) when user data are recorded in each recording layer, and determining the optimal recording power by evaluating the reproduction results (understood from “OPC”), wherein when test recording areas are formed by recording the test data, the test recording areas in the odd-numbered recording layers (see OPC\_L1 & OPC\_L3) and the test recording areas in which the test data are recorded in the even-numbered recording layers (see OPC\_L0 & OPC\_L2) do not overlap in the thickness direction (as shown) of the optical disc, the test recording areas in the odd-numbered recording layers are mutually aligned in the thickness direction (see OPC\_L1 & OPC\_L3), and the test recording layers in the even-numbered recording layers are mutually aligned in the thickness direction (see OPC\_L0 & OPC\_L2).

In regard to claim 2, Lee et al. disclose that the test recording areas in the odd-numbered recording layers and the test recording areas in the even-numbered recording layers are both formed near an innermost circumference of the optical disc (as shown in Figure 5A).

In regard to claim 5, Lee et al. disclose that the test recording areas are formed in positions facing a reproduce-only area of the optical disc (as shown in Figure 5A).

Claims 6, 7 & 10 have similar limitations as claims 1, 2 & 5; therefore, they are rejected on the same grounds.

In regard to claim 11, Lee et al. disclose an optical disc (Figure 5B) having at least three recording layers (L0-L3), having a reproduce-only area (DMA\_L0 through DMA\_L3, buffer areas and reserved areas) in each recording layer, a test recording area (OPC\_L0 through OPC\_L3) being formed in each recording layer by recording test data for determining the optimal recording power when user data are recorded, wherein the reproduce-only areas in the odd-numbered recording layers (DMA\_L1 & DMA\_L3 and corresponding buffer areas and

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reserved areas) are formed in positions mutually aligned in the thickness direction (as shown), the reproduce-only areas in the even-numbered recording layers (DMA\_L0 & DMA\_L2 and corresponding buffer areas and reserved areas) are formed in positions mutually aligned in the thickness direction (as shown), and at least part of the reproduce-only areas in the odd-numbered recording layers and at least part of the reproduce-only areas in the even-numbered recording layers are formed in positions mutually non-overlapping in the thickness direction of the optical disc (as shown).

In regard to claim 12, Lee et al. disclose that recording conditions for the disc are recorded in the reproduce-only areas (understood from “DMA”).

In regard to claim 13, Lee et al. disclose that the test recording areas in the even-numbered recording layers (OPC\_L0 & OPC\_L2) are formed in positions facing part of said part, or all of said part, of the reproduce-only areas in the odd-numbered recording layers (DMA\_L1 & DMA\_L3 and corresponding buffer areas and reserved areas); and the test recording areas in the odd-numbered recording layers (OPC\_L1 & OPC\_L3) are formed in positions facing part of said part, or all of said part, of the reproduce-only areas in the even-numbered recording layers (DMA\_L0 & DMA\_L2 and corresponding buffer areas and reserved areas).

### ***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 3 & 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al.

For a description of Lee et al., see the rejection above, which relies on Figure 5A of Lee et al. for teaching the claimed features. However, Figure 5A does not disclose: in regard to claim 3, that the test recording areas in the odd-numbered recording layers are formed near one of the innermost circumference and the outermost circumference of the optical disc, and the test recording areas in the even-numbered recording layers are formed near another one of the innermost circumference and the outermost circumference of the optical disc.

In another embodiment, Figure 8 of Lee et al. disclose: in regard to claim 3, a test recording area (OPC\_L0) in one recording layer formed near an outermost circumference of an optical disc, and a test recording area (OPC\_L1) in another recording layer formed near an innermost circumference of the optical disc.

It would have been obvious to one of ordinary skill in the art at the time of invention to have applied this arrangement in Figure 8 to the test recording areas in Figure 5A, the motivation being to prevent an influence of the OPC from an adjacent information storage layer (column 10, lines 19-24).

Claim 8 has similar limitations as claim 3; therefore, it is rejected on the same grounds.

***Allowable Subject Matter***

14. Claims 4 & 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

15. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record alone or in combination fails to teach or suggest:

in claim 4, the test recording areas in the odd-numbered recording layers and the test recording areas in which the test data are recorded in the even-numbered recording layers do not overlap in the thickness direction of the optical disc, the test recording areas in the odd-numbered recording layers are mutually aligned in the thickness direction, and the test recording layers in the even-numbered recording layers are mutually aligned in the thickness direction, wherein the test recording areas in the odd-numbered recording layers and the test recording areas in the even-numbered recording layers are both formed near an outermost circumference of the optical disc.

Claim 9 has similar allowable limitations as claim 4.

### ***Conclusion***

16. The prior art made of record and not relied upon (see attached PTO-892 form) are considered pertinent to applicant's disclosure of optical recording media having plural layers, each of which have optimal power calibration areas.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Agustin whose telephone number is (571) 272-7567. The examiner can normally be reached on Monday-Thursday 8:30 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter Vincent Agustin/  
Patent Examiner, Art Unit 2627